

CLAIMS

What is claimed is:

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1. A data service system in a data service network system, comprising:

a content server that stores content files for access by external access requests, wherein each of the content files is stored in a full content format and an adapted content format which is less resource-intensive to serve than the full content format;

an adaptive load control system coupled to the content server to pass the access requests to the content server, wherein the adaptive load control system modifies an access request to access the corresponding content file in the adapted content format when the content server is in an overload condition such that the content server is maintained at safe load conditions.

2. The data service system of claim 1, wherein the adaptive load control system modifies the access request to access the corresponding content file in the full content format when the content server is not in the overload condition.

3. The data service system of claim 1, wherein the adaptive load control system further comprises

a load monitor that monitors the load condition of the content server;

a content adapter coupled to the load monitor and the content server to modify the access request to access the corresponding content file in the adapted

content format when the load monitor indicates that the content server is in the overload condition.

4. The data service system of claim 3, wherein the adaptive load control system further comprises an adaption controller coupled to the load monitor and the content adapter to cause the content adapter to modify the access request to access the corresponding content file in the adapted content format when the load monitor indicates that the content server is in the overload condition.

5. The data service system of claim 4, wherein the adaption controller determines if the content server is in the overload condition by comparing the load information received by the load monitor against a predetermined desired load value of the content server.

6. The data service system of claim 3, wherein the content adapter modifies the access request to access the corresponding content file in the full content format when the load monitor indicates that the content server is not in the overload condition.

7. The data service system of claim 1, wherein the content adapter modifies the access request by modifying the URL (Universal Resource Locator) of the access request.

8. The data service system of claim 1, wherein for each of the content

files, the content server includes a service directory that directs the modified access request to access the corresponding content file in either the full content format or the adapted content format.

9. In a data service system of a data access network system having a content server that stores content files for access by external access requests, a method of maintaining the content server at safe load conditions, comprising the steps of:

determining load condition of the content server when the data service system receives an access request to access one of the content files stored in the content server;

if the content server is determined to be in an overload condition, then modifying the access request to access the corresponding content file in an adapted content format which is less resource-intensive to serve than the same file in a full content format such that the content server is maintained at the safe load conditions.

10. The method of claim 9, further comprising the step of modifying the access request to access the corresponding content file in a full content format when the content server is determined not to be in the overload condition.

11. The method of claim 9, wherein the step of determining load condition further comprises the steps of

obtaining the actual load condition of the content server using a load monitor;

comparing the actual load condition with a predetermined desired load condition to determine if the content server is in the overload condition.

12. The method of claim 9, wherein the step of modifying the access request is performed by modifying the URL of the access request.

13. The method of claim 10, wherein the step of modifying the access request is performed by modifying the URL of the access request.

14. The method of claim 9, further comprising the step of directing the modified access request to access the corresponding content file in either the full content format or the adapted content format.

15. The method of claim 9, wherein the step of determining load condition of the content server is performed either within the content server or external to the content server.

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